

TRAY CABLE - POWER - WITH GROUND - 600V

THHN/THWN-2 CONDUCTORS (6 AWG - 4/0 AWG)

Patents: encorewire.com/patents



ENGINEERING SPECIFICATIONS

Standards

Underwriters Laboratories® Standard UL-83, UL-1277, UL-1581, UL-1685, UL-2556; Compact Stranded Aluminum Alloy 8000 Series per ASTM B800, ASTM B801, ASTM B836; NFPA 70 (NEC®) Article 336; UL-1685 FT4/IEEE 1202 (70,000 Btu/hr) Flame Test; NEMA WC70/ICEA S-95-658; ICEA T-29-520 (210,000 Btu/hr) Flame Test; RoHS Compliant; MasterSpec Division 26 Sections 260519, 260523; UL Listing #E-179429

CONSTRUCTION

Conductors

Compact Stranded Conductors, Aluminum Alloy 8000 Series per ASTM B800, ASTM B801 and ASTM B836

Insulation

High-dielectric strength, heat, and moisture-resistant, colored Polyvinyl Chloride (PVC) rated for continuous use at 90°C dry or wet to meet UL-83 requirements for Type THHN or THWN-2 wire

Ground Conductor

Compact Stranded Conductors, Aluminum Alloy 8000 Series per ASTM B800, ASTM B801 and ASTM B836. *Insulated green ground.*

Overall Jacket

A flame-retardant, sunlight-resistant black PVC jacket is applied over core.

Assembly

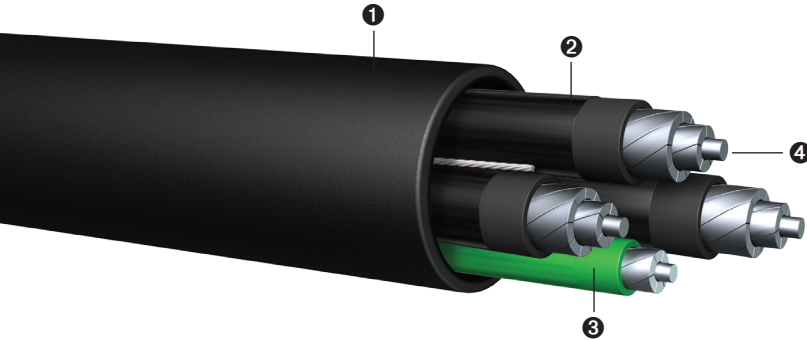
The insulated conductors are cabled together, with an insulated or bare ground. Nylon rip-cord is supplied for easy stripping; overall black PVC jacket.

Color Coding

Black insulation with ICEA Method 4 printed number

APPLICATIONS

Primarily used for connect power devices in an commercial and industrial environment. Suitable for installation in electrical channels, ducts, wireways, cable trays, and raceways. Approved for direct burial in wet or dry locations and outdoors in cable trays where sunlight-resistant rating is required. Cable constructed and listed for applications requiring type TC-ER rating. Encore Wire's Type TC-ER is acceptable for use in Class 1, Division 2 and Class 2, Division 2 locations where utilized with listed fittings rated for the classified location and condition of exposure to which the listed fittings are applied.



- ❶ PVC Jacket
- ❷ PVC Insulation w/ Nylon Jacket
- ❸ Green Insulated Compact Stranded Ground Conductor, AA-8000 Series (as required)
- ❹ Compact Stranded Conductor, AA-8000 Series

| Size (AWG) | No. of Conductors | No. of Strands | Size of Green Ground Wire (AWG) | No. of Strands for Ground | Outer Jacket Thickness PVC (in) | | Outside Diameter (in) | | Approximate Net Weight (lbs/1000 ft) | | Allowable Ampacity (Amps) ¹ | | Standard Packaging (ft) | |
|------------|-------------------|----------------|---------------------------------|---------------------------|---------------------------------|-------|-----------------------|-------|--------------------------------------|------|--|------|-------------------------|------------------------|
| | | | | | 3 | 4 | 3 | 4 | 3 | 4 | 75°C | 90°C | | |
| 6 | 3 | 4 | 7 | 6 AWG Insulated Green | 7 | 0.060 | 0.060 | 0.710 | 0.778 | 257 | 316 | 50 | 55 | 1000' 4000' Reels |
| 4 | 3 | 4 | 7 | 6 AWG Insulated Green | 7 | 0.080 | 0.080 | 0.872 | 0.965 | 361 | 450 | 65 | 75 | 1000' 3000' Reels |
| 3 | 3 | 4 | 7 | 6 AWG Insulated Green | 7 | 0.080 | 0.080 | 0.920 | 1.020 | 430 | 536 | 75 | 85 | 1000' 2000' Reels |
| 2 | 3 | 4 | 7 | 6 AWG Insulated Green | 7 | 0.080 | 0.080 | 0.977 | 1.086 | 496 | 618 | 90 | 100 | 1000' 2000' Reels |
| 1 | 3 | 4 | 8 | 4 AWG Insulated Green | 7 | 0.080 | 0.080 | 1.113 | 1.238 | 630 | 787 | 100 | 115 | 1000' 2000' Reels |
| 1/0 | 3 | 4 | 10 | 4 AWG Insulated Green | 7 | 0.080 | 0.080 | 1.184 | 1.320 | 733 | 908 | 120 | 135 | 1000' 2000' Reels |
| 2/0 | 3 | 4 | 12 | 4 AWG Insulated Green | 7 | 0.080 | 0.080 | 1.260 | 1.408 | 865 | 1070 | 135 | 150 | 500' 1000' 2000' Reels |
| 3/0 | 3 | 4 | 15 | 4 AWG Insulated Green | 7 | 0.080 | 0.080 | 1.350 | 1.512 | 1025 | 1275 | 155 | 175 | 1000' 2000' Reels |
| 4/0 | 3 | 4 | 19 | 2 AWG Insulated Green | 7 | 0.080 | 0.080 | 1.476 | 1.654 | 1236 | 1551 | 180 | 205 | 1000' 1500' Reels |

¹ For ampacities see NEC Table 310.15(B)(16) for insulated conductors; not more than three current-carrying conductors in a raceway, cable, or earth (directly buried), based on ambient temperature of 30°C (86°F). NEC Article 310.15(B)(2)(a) for ambient temperature correction factors for temperatures other than 30°C (86°F). NEC Table 310.15(B)(3)(a) for ampacity adjustment factors, as applicable, for more than three current-carrying conductors. NEC Article 110.14(C) for conductor temperature limitations for equipment rated 100 amps or less, or for equipment rated for more than 100 amps. The above data is approximate and subject to manufacturing tolerances.

PRINT LEGEND: ENCORE WIRE CORP (SIZE) W/G TYPE TC-ER-JP CABLE THHN OR THWN-2 AA-8000 AL CDRS SUN-RES 600 VOLT DIR-BUR (UL) DATE/TIME/OPER/QC

Last Edit: 5/21/24



ENGINEERING SPECIFICATIONS

Standards

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Overall Jacket

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Assembly

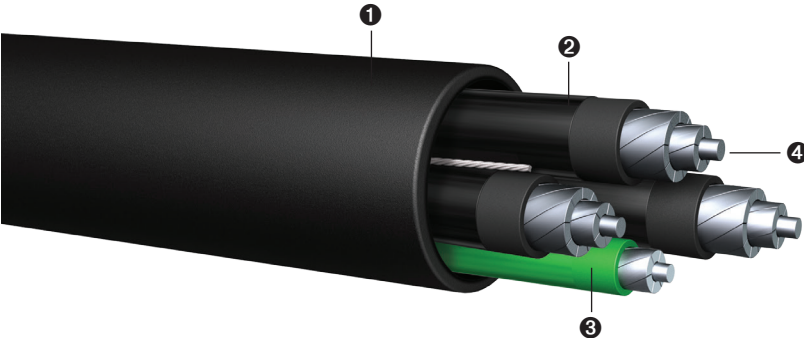
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|------------|-------------------|---|----------------|---------------------------------|---------------------------|---------------------------------|-------|-----------------------|-------|--------------------------------------|------|--|------|-------------------------|
| | | | | | | 3 | 4 | 3 | 4 | 3 | 4 | 75°C | 90°C | |
| 250 | 3 | 4 | 22 | 2 AWG Insulated Green | 7 | 0.080 | 0.110 | 1.608 | 1.863 | 1476 | 1942 | 205 | 230 | 1000' 1500' Reels |
| 300 | 3 | 4 | 21 | 2 AWG Insulated Green | 7 | 0.110 | 0.110 | 1.765 | 1.974 | 1794 | 2230 | 230 | 260 | 1000' 1500' Reels |
| 350 | 3 | 4 | 24 | 2 AWG Insulated Green | 7 | 0.110 | 0.110 | 1.855 | 2.077 | 2021 | 2518 | 250 | 280 | 1000' 1500' Reels |
| 400 | 3 | 4 | 27 | 1 AWG Insulated Green | 8 | 0.110 | 0.110 | 1.961 | 2.198 | 2253 | 2817 | 270 | 305 | 1000' 1500' Reels |
| 500 | 3 | 4 | 34 | 1 AWG Insulated Green | 8 | 0.110 | 0.110 | 2.112 | 2.369 | 2689 | 3366 | 310 | 350 | 1000' 1500' Reels |
| 600 | 3 | 4 | 41 | 1 AWG Insulated Green | 8 | 0.110 | 0.110 | 2.325 | 2.588 | 3222 | 4038 | 340 | 355 | 1000' 1500' Reels |
| 700 | 3 | 4 | 45 | 1/0 AWG Insulated Green | 10 | 0.110 | 0.140 | 2.463 | 2.815 | 3654 | 4696 | 375 | 425 | 1000' 1500' Reels |
| 750 | 3 | 4 | 47 | 1/0 AWG Insulated Green | 10 | 0.110 | 0.140 | 2.530 | 2.880 | 3870 | 4997 | 385 | 435 | 1000' 1500' Reels |
| 900 | 3 | 4 | 58 | 1/0 AWG Insulated Green | 10 | 0.140 | 0.140 | 2.786 | 3.094 | 4635 | 5816 | 425 | 480 | 1000' 1500' Reels |

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